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(54) Title: SYSTEM AND METHOD FOR DETERMINATION OF FETAL MOVEMENT

(57) Abstract: According to one aspect, the invention concerns a method for measuring motion of a fetus or of a region of a fetus within an uterus in a time sequence of images, each image including said fetus or region thereof and at least a portion of the uterus, the uterus comprising a lumen, the method comprising, for one or more images in the sequence (a) determining a first parameter indicative of movement of the fetus or region thereof; (b) determining a second parameter indicative of movement of at least a portion of the uterus; and (c). According to another aspect, the invention concerns for measuring motion of a fetus or of a region of a fetus within an uterus, the system comprising (a) an imaging device for obtaining a time sequence of images, each image including said fetus or region thereof and at least a portion of the uterus comprising a lumen; (b) a processing utility for processing said time sequence of images so as to obtain at least one first parameter indicative of movement of the fetus or region thereof and at least one second parameter indicative of movement of the uterus; and (c) a display utility for displaying said at least one first and said at least one second parameter. According to yet other aspects, the invention concerns a computer program being readable by a computer for executing the method of the invention and a machine-readable memory tangibly embodying a program of instructions executable by the machine for executing the method of the invention.

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PCT/IL 03/01069 A. CLASSIFICATION OF SUBJECT MAY IPC 7 A61B8/08 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 A61B Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 5 111 823 A (COHEN NATHAN) 1,19 A 12 May 1992 (1992-05-12) cited in the application column 18, line 50 -column 20, line 2; US 2002/072672 A1 (ROUNDHILL DAVID N ET 1,19 A AL) 13 June 2002 (2002-06-13) abstract P,A WO 03 003899 A (ULTRAMOVE LTD ;SHARONY 1,19 REUVEN (IL)) 16 January 2003 (2003-01-16) cited in the application the whole document Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-O document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled other means in the art. document published prior to the international filing date but "&" document member of the same patent family later than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 26/03/2004 18 March 2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 Tel. (+31-70) 340-3016 Tex. (+31-70) 340-3016 Manschot. J

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